

What is claimed is:

1. In a mobile communication terminal continuously transmitting a general control channel signal and intermittently
5 transmitting a specific control channel signal, a power control method comprising the steps of:

increasing a power of a general control channel to a power level requested to demodulate a specific control channel once transmission of the specific control channel signal is executed;

10 and

adjusting the increased power to meet a power level requested by a current general control channel transmission if the specific control channel transmission is completed.

15 2. The power control method of claim 1, wherein the adjusting step comprising the steps of:

removing a power level increment from the increased power;
and

re-adjusting the increased power from which the power level
20 increment is removed to the power level requested by the current general control channel transmission.

3. The power control method of claim 2, wherein the power level increment is removed by an equation of {[increased power] +

$[-d \times \Delta TPC]$ }, wherein 'd' is a value of deducing the increment of the power of the general control channel and ' ΔTPC ' is power intensity increasing or decreasing according to unit power level.

5 4. The power control method of claim 2, wherein the power level increment is removed by an equation of ' $(\text{increased power}) - \text{Max}\{0, [d - f(K_intv)]\}$ ', wherein ' K_intv ' is a number of slots from a time point of ending a current specific control channel transmission to a time point of initiating a next specific control channel transmission, ' $f(K_intv)$ ' is an arbitrary function using ' K_intv ' as a factor, and ' $\text{Max}\{a, b\}$ ' is a function of selecting the greater of 'a' or 'b'.

15 5. The power control method of claim 2, wherein the re-adjusting step is carried out using an equation of ' $(\text{power} - d) + [\text{TPC_comb}(\text{HS_end}) + y] \times \Delta TPC$ ', wherein ' $\text{TPC_comb}(\text{HS_end})$ ' is a power control value found by using power control commands collected from base stations in soft handover for a slot after completion of HS-DPCCH signal transmission, ' ΔTPC ' is power intensity increasing or decreasing according to unit power level, and 'y' is a value for compensating power control error occurring due to abrupt power reduction.

6. The power control method of claim 2, wherein the re-adjusted power includes a value for compensating power control error occurring due to abrupt power reduction.

5 7. The power control method of claim 6, wherein the value for compensating the power control error is 0.

8. The power control method of claim 6, wherein the value for compensating the power control error is 1.

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9. The power control method of claim 6, wherein the value for compensating the power control error is $TPC_comb(HS_start)$ and wherein ' $TPC_comb(HS_start)$ ' is a power control value found by using power control commands collected from base stations in
15 soft handover for a slot after completion of HS-DPCCH signal transmission.

10. The power control method of claim 6, wherein the value for compensating the power control error is
20 $[TPC_comb(HS_start)+1]$ and wherein ' $TPC_comb(HS_start)$ ' is a power control value found by using power control commands collected from base stations in soft handover for a slot after completion of HS-DPCCH signal transmission.

11. The power control method of claim 1, wherein the specific control channel is a HS_DPCCH (high speed-dedicated physical control channel) in a HSDPA system and the general control channel is DPCCH (dedicated physical control channel).

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12. The power control method of claim 1, wherein the terminal is in soft handover.

13. The power control method of claim 12, wherein the
10 terminal performs HSDPA (high speed downlink packet access) service.

14. The power control method of claim 1, wherein the
15 adjusted power is applied to transmission of a first slot section after completion of the specific control channel transmission.

15. The power control method of claim 1, wherein a power level requested by current general control channel transmission is found by an equation of

20 $\Delta_{DPCCH} = (-d \times \Delta TPC) + [TPC_comb(HS_end) + y] \times \Delta TPC$,
wherein 'd' is a value of deducing a general control channel power increment required for transmitting the specific control channel signal, 'TPC_comb(HS_start)' is a power control value found by using power control commands collected from base

stations in soft handover for a slot after completion of HS-DPCCH
signal transmission, ' ΔTPC ' is power intensity increasing or
decreasing according to a unit power level, and ' y ' is a value
for compensating power control error occurring due to abrupt
5 power reduction.

16. A method of adjusting uplink DPCCH (dedicated physical
control channel) transmission power for a terminal in soft
handover that transmits a DPCCH using a first power control
10 method, the adjusting method comprising:

applying a second power control method to the DPCCH
transmission for at least a K_{algol} number of slots upon
completion of HS-DPCCH (high speed dedicated physical control
channel) transmission.

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17. The method of claim 16, further comprising a step of
applying, after completion of HS-DPCCH transmission, the first
power control method beginning from a boundary of a first N slot
group or a first $M \times N$ slot group appearing after a $(K_{\text{algol}})^{\text{th}}$
20 slot.

18. The method of claim 16, wherein a region operating under
the second power control method is dynamically reduced.

19. The method of claim 17, wherein a region operating under the second power control method is dynamically reduced.

20. A method of adjusting uplink transmission control power for a terminal in soft handover, the method comprising:

increasing a first uplink transmission control power up to a second uplink transmission control power such that a high speed control channel can be transmitted; and

decreasing the second uplink control power back to the first uplink transmission control power after transmission of the high speed control channel is completed.

21. The method of claim 20, wherein the control channel is a DPCCH (dedicated physical control channel).

22. The method of claim 20, wherein the high speed control channel is a HS-DPCCH (high speed dedicated physical control channel)

23. The method of claim 20, wherein the decreasing step includes compensation for power control errors.

24. The method of claim 20, wherein the decreasing step is applied by the terminal for a plurality of slots.

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25. The method of claim 20, wherein the first uplink transmission control power is applied to groups of slots, each group having at least two slots.

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26. The method of claim 25, wherein the second uplink transmission control power is applied to each individual slot.